



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,876	02/06/2006	Yasuhiro Nose	273032US8 PCT	8328
22850	7590	09/04/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
TURNER, ASHLEY D				
ART UNIT		PAPER NUMBER		
2154				
NOTIFICATION DATE		DELIVERY MODE		
09/04/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com

oblonpat@oblon.com

jgardner@oblon.com

Office Action Summary

Application No.

10/536,876

Applicant(s)

NOSE ET AL.

Examiner

ASHLEY D. TURNER

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date 5/30/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US 7,386,623 B2) in view of Takihiro (US 6,278,712 B1).

Regarding claim 1

Referring to claim 1 Nishimura discloses a download system comprising a server to manage data, and a communication terminal to download the data from the server, wherein the communication terminal comprises: reservation candidate acquiring means for transmitting to the server a transmission request for transmission of reservation candidate information containing time information indicating at least a start time concerning each candidate time zone to which a reservation for download of the data can be allocated, and for acquiring the reservation candidate information transmitted in response to the request by the server; (Col.1 lines 56 and Col.2 lines 1-3 On the other hand, when the above-described live distribution is performed, a content creator needs to send motion picture data to the streaming server in real time, and therefore it is

necessary to keep a communication path to transmit motion picture data between a streaming server and a personal computer (hereinafter referred to as "PC") of the content distributor when the live distribution is performed. This limits the number of content that can be distributed by the live distribution by the streaming server at the same time. In a rush hour, some content distributors who have prepared for the live distribution in the time zone may not perform the live distribution in that time zone. In order to prevent such a problem and to effectively use the streaming server to perform live distribution, it is considered that the streaming server should be reserved.)

reservation selecting means for transmitting to the server reservation choice information containing as reservation time information the time information selected based on the reservation candidate information acquired by the reservation candidate acquiring means, and for storing the start time indicated by the reservation time information, as an initiation time of the download; data request transmitting means for transmitting a transmission request for transmission of the data to the server, at the initiation time stored by the reservation selecting means; and data receiving means for receiving the data transmitted by the server in accordance with the transmission request for transmission of the data transmitted by the data request transmitting means (Col. 2 lines 34-58 The foregoing object and other objects of the invention have been achieved by the provision of a content distribution notification method, a reservation control apparatus and a program storage medium. In order to distribute content by live distribution by means of a distribution server that distribute content by streaming over a network to a client terminal apparatus, when a distributor terminal apparatus makes a

reservation for the use of the distribution server via the network to the reservation control apparatus that controls the reservation of the distribution server and the content is distributed by the live distribution by means of the distribution server based on the reservation, the following steps are carried out to inform client users of client terminal apparatuses that the content is distributed based on the reservation. At first, the distributor terminal apparatus sends reservation request information including the desired service time to use the distribution server and contact addresses of client users who should be informed of the content distribution, to the reservation control apparatus via a network. Then, when content is allowed to be distributed by means of the distribution server in the desired service time of use included in the reservation request information, the reservation control apparatus sends notification information about the content distribution to the contact addresses of the client users via the network.) ;

Nishimura did not disclose wherein the server comprises: data storing means for storing the data; reservation information storing means for storing a reservation table in which the reservation for the download is to be allocated to reservation frames within a maximum number at each time to permit simultaneous execution of the download, set based on a load state at each time preliminarily measured; reservation candidate generating means for, in response to the transmission request for the transmission of the reservation candidate information transmitted by the communication terminal, determining time zones as candidates available for the download of the data, based on the reservation table stored in the reservation information storing means, for generating the reservation candidate information containing the time information about the time

zones, and for transmitting the reservation candidate information to the communication terminal; reservation registering means for receiving the reservation choice information transmitted by the communication terminal, and for registering in the reservation table the reservation for the download in the time zone corresponding to the reservation time information included in the reservation choice information; and data transmitting means for transmitting to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted by the communication terminal. Takihiro discloses wherein the server comprises: data storing means for storing the data; reservation information storing means for storing a reservation table in which the reservation for the download is to be allocated to reservation frames within a maximum number at each time to permit simultaneous execution of the download, set based on a load state at each time preliminarily measured; reservation candidate generating means for, in response to the transmission request for the transmission of the reservation candidate information transmitted by the communication terminal, determining time zones as candidates available for the download of the data, based on the reservation table stored in the reservation information storing means, for generating the reservation candidate information containing the time information about the time zones, and for transmitting the reservation candidate information to the communication terminal; reservation registering means for receiving the reservation choice information transmitted by the communication terminal, and for registering in the reservation table the reservation for the download in the time zone corresponding to the reservation time information

included in the reservation choice information; and data transmitting means for transmitting to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted by the communication terminal. (Col.12 lines 28 -42 In this instance, since the resource reservation is performed on the basis of the resource reservation request message 51 in which the reservation priority 518 is "priority", there may be a reserved resource which does not have the priority and cannot be maintained to be reserved. In such a case (step 2115), by eliminating the relevant entry in the reserved resources management table 214 with respect to the reserved resources having the priority, the reservation in the self switching node is cancelled (step 2116) and the resource reservation result notice message 52 in which the cancellation of the reservation by the reservation having the priority is set in the reservation result 527 is sent to the transmission user terminal and the destination user terminal of the communication in which the reservation is cancelled (step 2117). When the transmission user terminal and the destination user terminal are not linked to the self switching node, the resource reservation result notice message 52 is transferred to each of the transmission user terminal and the destination user terminal via one or more other switching nodes. In the switching node through which the resource reservation result notice message 52 is sent, by deleting the relevant entry in the reserved resources management table 214 in the self switching node in accordance with the resource reservation result notice message 52, the reservation in the self switching node is cancelled.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify

Nishimura to include wherein the server comprises: data storing means for storing the data; reservation information storing means for storing a reservation table in which the reservation for the download is to be allocated to reservation frames within a maximum number at each time to permit simultaneous execution of the download, set based on a load state at each time preliminarily measured; reservation candidate generating means for, in response to the transmission request for the transmission of the reservation candidate information transmitted by the communication terminal, determining time zones as candidates available for the download of the data, based on the reservation table stored in the reservation information storing means, for generating the reservation candidate information containing the time information about the time zones, and for transmitting the reservation candidate information to the communication terminal; reservation registering means for receiving the reservation choice information transmitted by the communication terminal, and for registering in the reservation table the reservation for the download in the time zone corresponding to the reservation time information included in the reservation choice information; and data transmitting means for transmitting to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted by the communication terminal in order to provide the resource can be effectively used and low-cost services can be provided to the user.

Regarding claim 2

Referring to claim 2 Nishimura and Takihiro discloses all the limitations of claim 2 which is described above. Nishimura also discloses wherein, in generating the reservation candidate information, the reservation candidate selecting means of the server temporarily allocates in the reservation table, reservations for the download corresponding to the time information included in the reservation candidate information, together with information to identify the communication terminal having transmitted the transmission request for transmission of the reservation candidate information, and wherein the reservation registering means adopts the reservation in the time zone corresponding to the reservation time information included in the reservation choice information transmitted by the communication terminal, among the reservations temporarily allocated together with the information to identify the communication terminal, in the reservation table, and cancels the other reservations temporarily allocated together with the information to identify the communication terminal, in the reservation table.(FIG. 22, the switching nodes 2-1' to 2-4' store and hold reserved resources management tables 214-1 to 214-4 for managing the resources reserved by all of the other switching nodes in the network 1' in addition to the resources reserved by the self switching node. Since each of the switching nodes 2-1' to 2-4' received the reservation resource notice message 54 from the other switching nodes changes the contents of the reservation resource management table corresponding to the switching node shown by the switching node information 552 in the reservation resource notice message 54 in accordance with the reservation resource notice message 54, the contents of the reserved resources management

tables 214-1 to 214-4 stored and held by the switching nodes 2-1' to 2-4' are always the same).

Regarding claim 3

Referring to claim 3 Nishimura and Takihiro discloses all the limitations of claim 3 which is described above. Nishimura also discloses wherein, in generating the reservation candidate information, the reservation candidate generating means of the server generates the reservation candidate information preferentially contain the time information about time zones with a large number of said reservation frames to which the reservation for the download is not allocated, based on the reservation table. (paragraph [0126] Furthermore, the streaming server 102 performs streaming distribution processing of content sent from the live distributor with the user PC 106 as described above, and stores commercial content, etc. to be distributed during a free time zone with no reservation or intervals between programs, to distribute the commercial content in such free time zones. [0127] Furthermore, the streaming server 102 controls the distribution time zone and restriction on the number of client PCs 107 which is to receive content, according to the contents of reservation permitted to the user PC 106 by the server reservation control center 101. This processing will be described later.)

Regarding claim 4

Referring to claim 4 Nishimura and Takihiro discloses all the limitations of claim 4 which is described above. Nishimura also discloses wherein the communication terminal further comprises available range acquiring means for transmitting to the server a transmission request for transmission of available range information containing information about presence/absence of a time zone available for the reservation for the download in each of second predetermined periods obtained by subdividing a first predetermined period, and for receiving the available range information transmitted from the server ([0126] Furthermore, the streaming server 102 performs streaming distribution processing of content sent from the live distributor with the user PC 106 as described above, and stores commercial content, etc. to be distributed during a free time zone with no reservation or intervals between programs, to distribute the commercial content in such free time zones.) , wherein the server further comprises available range generating means for generating the available range information in accordance with the transmission request for transmission of the available range information transmitted by the communication terminal, and for transmitting the available range information to the communication terminal, wherein the reservation candidate acquiring means transmits to the server the transmission request for transmission of the reservation candidate information containing the information about the second predetermined period selected based on the available range information received by the available range acquiring means ([0014] The foregoing object and other objects of the invention have been achieved by the provision of a

content distribution notification method, a reservation control apparatus and a program storage medium. In order to distribute content by live distribution by means of a distribution server that distribute content by streaming over a network to a client terminal apparatus, when a distributor terminal apparatus makes a reservation for the use of the distribution server via the network to the reservation control apparatus that controls the reservation of the distribution server and the content is distributed by the live distribution by means of the distribution server based on the reservation, the following steps are carried out to inform client users of client terminal apparatuses that the content is distributed based on the reservation. At first, the distributor terminal apparatus sends reservation request information including the desired service time to use the distribution server and contact addresses of client users who should be informed of the content distribution, to the reservation control apparatus via a network. Then, when content is allowed to be distributed by means of the distribution server in the desired service time of use included in the reservation request information, the reservation control apparatus sends notification information about the content distribution to the contact addresses of the client users via the network.) Nishimura did not disclose and wherein the reservation candidate generating means generates the reservation candidate information containing the time information about time zones available for the reservation for the download in the second predetermined period, based on the information about the second predetermined period included in the transmission request for transmission of the reservation candidate information transmitted by the communication terminal, and transmits the reservation candidate

information to the communication terminal. The general concept of wherein the reservation candidate generating means generates the reservation candidate information containing the time information about time zones available for the reservation for the download in the second predetermined period, based on the information about the second predetermined period included in the transmission request for transmission of the reservation candidate information transmitted by the communication terminal, and transmits the reservation candidate information to the communication terminal is well known in the art as taught by Takihiro. Takihiro discloses wherein the reservation candidate generating means generates the reservation candidate information containing the time information about time zones available for the reservation for the download in the second predetermined period, based on the information about the second predetermined period included in the transmission request for transmission of the reservation candidate information transmitted by the communication terminal, and transmits the reservation candidate information to the communication terminal(Col. 9 lines 45-55 In order to receive the service of the service class "B" or "B-", each of the user terminals 4-1 to 4-2 sends the resource reservation request message in which at least the data except for the communication rate 516 is set. Especially, this service class is set in the service class 512. A communication quantity desired by the user is set in the communication quantity 517. The communication start date and time and communication end date and time which are desired by the user are set in the communication start time 519 and the communication end time 520. In case of "B", "priority" is set in the reservation priority

518. In case of "B-", "non-priority" is set. Since the service of the service class "B" or "B-" is the service adapted to a communication which does not require the real-time performance, the communication start date and time and the communication end date and time set in the communication start time 519 and the communication end time 520 do not show strict communication time but show flexible communication time. That is, for example, when the user transfers a file of a predetermined amount of data, a time zone (permissible time range of the communication time) during which the file is transferred is designated by the communication start time 519 and the communication end time 520). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nishimura to include wherein the reservation candidate generating means generates the reservation candidate information containing the time information about time zones available for the reservation for the download in the second predetermined period, based on the information about the second predetermined period included in the transmission request for transmission of the reservation candidate information transmitted by the communication terminal, and transmits the reservation candidate information to the communication terminal in order to provide the resource can be effectively used and low-cost services can be provided to the user.

Regarding claim 5

Referring to claim 5 Nishimura and Takihiro discloses all the limitations of claim 5 which is described above. Nishimura also discloses wherein the available range

information generated by the available range generating means contains level information indicating a number of said reservation flames to which the reservation for the download is not allocated, in each of the second predetermined periods. (paragraph [0132] Furthermore, this personal casting service allows connection to the streaming server 102 a predetermined time before the distribution start time based on the reservation, making it possible to complete connection processing such as authentication before the time at which the distribution is started and to perform live distribution at the reserved distribution start time. Therefore, if reservation times of different users are continuous, the following problem may occur. That is, the connection of a user receiving a distribution who reserved a previous time zone may overlap the connection after a predetermined time before distribution is started, by the user who reserved a Posterior time zone, and the number of lines equal to the maximum number of users who can receive distribution are not enough. Thus, providing lines twice the maximum number of users can handle even the case where the connection by the user who reserves the preceding time zone overlaps the connection by the user who reserves the posterior time zone.)

Regarding claim 6

Referring to claim 6 Nishimura and Takihiro discloses all the limitations of claim 6 which is described above. Nishimura also discloses wherein the available range information generated by the available range generating means is comprised of a list

indicating binary values of the information about the presence/absence of a time zone available for the reservation for the download in each of the second predetermined periods. (Paragraph [0164] The input item "Friend list" in the reservation input column 222 is the column to enter e-mail addresses of people who the user of the user PC 106 wants to be notified that the content will be distributed in a time zone and with a channel based on the reservation. The live casting server 150 sends e-mail including various kinds of information to receive the content based on the relevant reservation, to the entered e-mail addresses, which will be described later.)

Regarding claim 7

Referring to claim 7 Nishimura and Takihiro discloses all the limitations of claim 7 which is described above. Nishimura did not disclose wherein the available range information generated by the available range generating means is comprised of a list resulting from further text conversion of a list indicating binary values of the information about the presence/absence of a time zone available for the reservation for the download in each of the second predetermined periods. The general concept of wherein the available range information generated by the available range generating means is comprised of a list resulting from further text conversion of a list indicating binary values of the information about the presence/absence of a time zone available for the reservation for the download in each of the second predetermined periods is well known in the art as taught by Takihiro. Takihiro discloses wherein the available range information generated

by the available range generating means is comprised of a list resulting from further text conversion of a list indicating binary values of the information about the presence/absence of a time zone available for the reservation for the download in each of the second predetermined periods. (Col.28 lines 15-29 The resource reservation change message 1900 consists of header information 1910, a code 1920 indicative of change of resource reservation, requesting person's ID 1930, reservation approval information 1940 such as reservation approval number, communication destination information 1950 such as a network address of the communication destination user equipment, communication quality information 1960 including a band used for the communication, a communication delay permissible range, and the like, communication time information 1970 such as communication start time and end time, and requesting person's certification information 1980 such as the ID and electronic signature data of the requesting person.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nishimura to include wherein the available range information generated by the available range generating means is comprised of a list resulting from further text conversion of a list indicating binary values of the information about the presence/absence of a time zone available for the reservation for the download in each of the second predetermined periods in order to provide the resource can be effectively used and low-cost services can be provided to the user.

Regarding claim 8

Referring to claim 8 Nishimura discloses communication terminal adapted for downloading data from a server to manage the data, comprising: reservation candidate acquiring means for transmitting to the server a transmission request for transmission of reservation candidate information containing time information indicating at least a start time concerning each candidate time zone to which a reservation for download of the data can be allocated, and for acquiring the reservation candidate information transmitted in response to the request by the server (Paragraph [0164] The input item "Friend list" in the reservation input column 222 is the column to enter e-mail addresses of people who the user of the user PC 106 wants to be notified that the content will be distributed in a time zone and with a channel based on the reservation. The live casting server 150 sends e-mail including various kinds of information to receive the content based on the relevant reservation, to the entered e-mail addresses, which will be described later.); reservation selecting means for transmitting to the server reservation choice information containing as reservation time information the time information selected based on the reservation candidate information acquired by the reservation candidate acquiring means([0126] Furthermore, the streaming server 102 performs streaming distribution processing of content sent from the live distributor with the user PC 106 as described above, and stores commercial content, etc. to be distributed during a free time zone with no reservation or intervals between programs, to distribute the commercial content in such free time zones.), Nishimura did not disclose for storing the start time indicated by the reservation time information, as an initiation time of the

download; data request transmitting means for transmitting a transmission request for transmission of the data to the server, at the initiation time stored by the reservation selecting means; and data receiving means for receiving the data transmitted by the server in accordance with the transmission request for transmission of the data transmitted by the data request transmitting means. The general concept of for storing the start time indicated by the reservation time information, as an initiation time of the download; data request transmitting means for transmitting a transmission request for transmission of the data to the server, at the initiation time stored by the reservation selecting means; and data receiving means for receiving the data transmitted by the server in accordance with the transmission request for transmission of the data transmitted by the data request transmitting means is well known in the art as taught by Takihiro. Takihiro discloses for storing the start time indicated by the reservation time information, as an initiation time of the download; data request transmitting means for transmitting a transmission request for transmission of the data to the server, at the initiation time stored by the reservation selecting means; and data receiving means for receiving the data transmitted by the server in accordance with the transmission request for transmission of the data transmitted by the data request transmitting means. (Col.28 lines 15-29 The resource reservation change message 1900 consists of header information 1910, a code 1920 indicative of change of resource reservation, requesting person's ID 1930, reservation approval information 1940 such as reservation approval number, communication destination information 1950 such as a network address of the communication destination user equipment, communication quality information 1960

including a band used for the communication, a communication delay permissible range, and the like, communication time information 1970 such as communication start time and end time, and requesting person's certification information 1980 such as the ID and electronic signature data of the requesting person.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nishimura to include for storing the start time indicated by the reservation time information, as an initiation time of the download; data request transmitting means for transmitting a transmission request for transmission of the data to the server, at the initiation time stored by the reservation selecting means; and data receiving means for receiving the data transmitted by the server in accordance with the transmission request for transmission of the data transmitted by the data request transmitting means in order to provide the resource can be effectively used and low-cost services can be provided to the user.

Referring to claim 9

Referring to claim 9 Nishimura and Takihiro discloses all the limitations of claim 9 which is described above. Nishimura also discloses further comprising available range acquiring means for transmitting to the server a transmission request for transmission of available range information containing information about presence/absence of a time zone available for the reservation for the download in each of second predetermined periods obtained by subdividing a first predetermined period, and for receiving the available range information transmitted from the server, wherein the reservation

candidate acquiring means transmits to the server the transmissions request for transmission of the reservation candidate information containing the information about the second predetermined period selected based on the available range information received by the available range acquiring means. (Col.22 lines 3-15 The items to be entered in the reservation input column 222 are "channel" to select a channel to be used, "reservation date/time" to specify the date/time of reservation, "open level", "title" to enter the title of the content, "genre" to enter the genre to which the content belong, "open of e-mail" to select whether to open the e-mail address of the content provider, "Open of Web" to select whether to open the URL of the Web page of the content provider, "password" to enter a password, "friend list", "outline" to write an outline of the content in up to a predetermined number of characters (e.g., 20 characters) and "detail" to write the detail of the content in up to a predetermined number of characters (e.g., 200 characters).

Referring to claim 10

Referring to claim 10 Nishimura discloses a server adapted for managing data to be downloaded by a communication terminal, comprising: data storing means for storing the data; reservation information storing means for storing a reservation table in which the reservation for the download is to be allocated to reservation flames within a maximum number at each time to permit simultaneous execution of the download, set based on a load state at each time preliminarily measured; reservation candidate

generating means for, in response to the transmission request for the transmission of the reservation candidate information transmitted by the communication terminal (Paragraph [0164] The input item "Friend list" in the reservation input column 222 is the column to enter e-mail addresses of people who the user of the user PC 106 wants to be notified that the content will be distributed in a time zone and with a channel based on the reservation. The live casting server 150 sends e-mail including various kinds of information to receive the content based on the relevant reservation, to the entered e-mail addresses, which will be described later.), determining time zones as candidates available for the download of the data, based on the reservation table stored in the reservation information storing means, for generating the reservation candidate information containing time information about the time zone indicating at least a start time thereof, and for transmitting the reservation candidate information to the communication terminal; reservation registering means for receiving the reservation choice information containing as reservation time information the time information selected based on the reservation candidate information, transmitted by the communication terminal([0126] Furthermore, the streaming server 102 performs streaming distribution processing of content sent from the live distributor with the user PC 106 as described above, and stores commercial content, etc. to be distributed during a free time zone with no reservation or intervals between programs, to distribute the commercial content in such free time zones.), Nishimura did not disclose for registering in the reservation table the reservation for the download in the time zone indicated by the reservation time information included in the reservation choice

information; and data transmitting means for transmitting to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted at the start time of the reservation time information by the communication terminal. The general concept of registering in the reservation table the reservation for the download in the time zone indicated by the reservation time information included in the reservation choice information; and data transmitting means for transmitting to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted at the start time of the reservation time information by the communication terminal is well known in the art as taught by Takihiro. Takihiro discloses registering in the reservation table the reservation for the download in the time zone indicated by the reservation time information included in the reservation choice information; and data transmitting means for transmitting to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted at the start time of the reservation time information by the communication terminal. (Col 26 lines 62-67 and Col. 27 lines 1-7 On the resource reservation list window 1200, a reservation information list 1210 including a reserver, a communication destination, communication start date and time, communication end date and time, communication quality, and the like is displayed. When the user depresses an OK button 1220, the resource reservation list window 1200 is erased. When the user depresses a detail button 1230, detailed information regarding a reservation item selected in the reservation information list at that time is displayed on the resource reservation detail

window. Since the user can always confirm the resource reservation state as mentioned above, the reservation request can be issued in consideration of the use state of the network). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nishimura to include registering in the reservation table the reservation for the download in the time zone indicated by the reservation time information included in the reservation choice information; and data transmitting means for transmitting to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted at the start time of the reservation time information by the communication terminal in order to provide the resource can be effectively used and low-cost services can be provided to the user.

Regarding claim 11

Referring to claim 11 Nishimura and Takihiro discloses all the limitations of claim 11 which is described above. Nishimura also discloses wherein, in generating the reservation candidate information, the reservation candidate selecting means temporarily allocates in the reservation table, reservations for the download corresponding to the time information included in the reservation candidate information, together with information to identify the communication terminal having transmitted the transmission request for transmission of the reservation candidate information, and wherein the reservation registering means adopts the reservation in the time zone

corresponding to the reservation time information included in the reservation choice information transmitted by the communication terminal, among the reservations temporarily allocated together with the information to identify the communication terminal, in the reservation table, and cancels the other reservations temporarily allocated together with the information to identify the communication terminal, in the reservation table. (Col. 8 lines 32-43 As shown in FIG. 6B, "operation" of the GUI in the upload mode includes an item to instruct connection/disconnection with the Internet ("connect/disconnect Net"), an item to instruct start/end of transmission of image data ("transmit start/stop"), an item to instruct movement of the focus F to the list display area 43 ("Move focus"), an item to instruct a view inside the transmission capsule icon SC, that is, a view of the list of image data selected to be sent ("see transmission capsule"), etc. and it is possible to select a desired item by rotating the operation dial 126b to move the focus F to a desired item and then pressing the operation dial 126b.)

Regarding claim 12

Referring to claim 12 Nishimura and Takihiro discloses all the limitations of claim 12 which is described above. Nishimura also discloses wherein in generating the reservation candidate information, the reservation candidate generating means generates the reservation candidate information preferentially contain the time information about time zones with a large number of said reservation frames to which the reservation for the download is not allocated, based on the reservation table. (Col.2

lines 5-23 Furthermore, the content distributor may want to distribute content to specific people by the live distribution in a reserved time zone. For example, in the case of distributing content of image data, etc. of pictures taken of a wedding ceremony and wedding reception, etc. by the live distribution, it may be desired that live video, etc. of the wedding ceremony be presented to the couple's family members and friends, etc. who are absent from the ceremony. In the case where it is desired that live video, etc. of the wedding ceremony be presented to those family members and friends, etc., the content distributor may notify that people of the distribution time and the connection method to receive distribution, that is, the method of accessing the streaming server, by telephone, etc. in advance, and the family members and friends, etc. can receive the content by accessing the streaming server at the distribution time, but such a notification procedure is bothering work).

Referring to claim 13

Referring to claim 13 Nishimura and Takihiro discloses all the limitations of claim 13 which is described above. Nishimura also discloses further comprising available range generating means for receiving a transmission request for transmission of available range information transmitted by the communication terminal, for, in response to the transmission request for transmission of the available range information, generating the available range information containing information about presence/absence of a time zone available for the reservation for the download in each of second predetermined

periods obtained by subdividing a first predetermined period, and for transmitting the available range information to the communication terminal, wherein the reservation candidate generating means receives the reservation candidate information containing information about the second predetermined period selected based on the available range information, transmitted by the communication terminal, generates the reservation candidate information containing the time information about time zones available for the reservation for the download in the second predetermined period, based on the information about the second predetermined period included in the transmission request for transmission of the reservation candidate information, and transmits the reservation candidate information to the communication terminal.

Referring to claim 14

Referring to claim 14 Nishimura and Takihiro discloses all the limitations of claim 14 which is described above. Nishimura also discloses wherein the available range information generated by the available range generating means contains level information indicating a number of said reservation frames to which the reservation for the download is not allocated, in each of the second predetermined periods. (Paragraph [0164] The input item "Friend list" in the reservation input column 222 is the column to enter e-mail addresses of people who the user of the user PC 106 wants to be notified that the content will be distributed in a time zone and with a channel based on the reservation. The live casting server 150 sends e-mail including various kinds of

information to receive the content based on the relevant reservation, to the entered e-mail addresses, which will be described later.)

Referring to claim 15

Referring to claim 15 Nishimura and Takihiro discloses all the limitations of claim 15 which is described above. Nishimura also discloses wherein the available range information generated by the available range generating means is comprised of a list indicating binary values of the information about the presence/absence of a time zone available for the reservation for the download in each of the second predetermined periods. (Col.22 lines 3-15 The items to be entered in the reservation input column 222 are "channel" to select a channel to be used, "reservation date/time" to specify the date/time of reservation, "open level", "title" to enter the title of the content, "genre" to enter the genre to which the content belong, "open of e-mail" to select whether to open the e-mail address of the content provider, "Open of Web" to select whether to open the URL of the Web page of the content provider, "password" to enter a password, "friend list", "outline" to write an outline of the content in up to a predetermined number of characters (e.g., 20 characters) and "detail" to write the detail of the content in up to a predetermined number of characters (e.g., 200 characters).

Referring to claim 16

Referring to claim 16 Nishimura and Takihiro discloses all the limitations of claim 16 which is described above. Nishimura also discloses wherein the available range information generated by the available range generating means is comprised of a list resulting from further text conversion of a list indicating binary values of the information about the presence/absence of a time zone available for the reservation for the download in each of the second predetermined periods. (Paragraph [0164] The input item "Friend list" in the reservation input column 222 is the column to enter e-mail addresses of people who the user of the user PC 106 wants to be notified that the content will be distributed in a time zone and with a channel based on the reservation. The live casting server 150 sends e-mail including various kinds of information to receive the content based on the relevant reservation, to the entered e-mail addresses, which will be described later.)

Regarding claim 17

Referring to claim 17 Nishimura discloses A download method in which a communication terminal downloads data from a server to manage the data, the download method comprising: a reservation candidate request transmitting step wherein reservation candidate acquiring means of the communication terminal transmits to the server a transmission request for transmission of reservation candidate information containing time information indicating at least a start time concerning each candidate

time zone to which a reservation for download of the data can be allocated; a reservation candidate generating step wherein, in response to the transmission request for transmission of the reservation candidate information transmitted by the communication terminal(Paragraph [0164] The input item "Friend list" in the reservation input column 222 is the column to enter e-mail addresses of people who the user of the user PC 106 wants to be notified that the content will be distributed in a time zone and with a channel based on the reservation. The live casting server 150 sends e-mail including various kinds of information to receive the content based on the relevant reservation, to the entered e-mail addresses, which will be described later.) , reservation candidate generating means of the server determines time zones as candidates available for the download of the data, based on a reservation table in which the reservation for the download is to be allocated to reservation frames within a maximum number at each time to permit simultaneous execution of the download, set based on a load state at each time preliminarily measured, and which is stored in reservation information storing means, generates the reservation candidate information containing the time information about the time zones(Col. 8 lines 32-43 As shown in FIG. 6B, "operation" of the GUI in the upload mode includes an item to instruct connection/disconnection with the Internet ("connect/disconnect Net"), an item to instruct start/end of transmission of image data ("transmit start/stop"), an item to instruct movement of the focus F to the list display area 43 ("Move focus"), an item to instruct a view inside the transmission capsule icon SC, that is, a view of the list of image data selected to be sent ("see transmission capsule"), etc. and it is possible to select a

desired item by rotating the operation dial 126b to move the focus F to a desired item and then pressing the operation dial 126b.), and transmits the reservation candidate information to the communication terminal; a reservation candidate acquiring step wherein the reservation candidate acquiring means of the communication terminal acquires the reservation candidate information transmitted by the server, a reservation selecting step wherein reservation selecting means of the communication terminal transmits to the server reservation choice information containing as reservation time information the time information selected based on the reservation candidate information acquired by the reservation candidate acquiring means, and stores the start time indicated by the reservation time information, as an initiation time of the download; a reservation registering step wherein reservation registering means of the server receives the reservation choice information transmitted by the communication terminal, and registers in the reservation table the reservation for the download in the time zone corresponding to the reservation time information included in the reservation choice information; a data request transmitting step wherein data request transmitting means of the communication terminal transmits a transmission request for transmission of the data to the server, at the initiation time stored by the reservation selecting means(Col.1 lines 56 and Col.2 lines 1-3 On the other hand, when the above-described live distribution is performed, a content creator needs to send motion picture data to the streaming server in real time, and therefore it is necessary to keep a communication path to transmit motion picture data between a streaming server and a personal computer (hereinafter referred to as "PC") of the content distributor when the live

distribution is performed. This limits the number of content that can be distributed by the live distribution by the streaming server at the same time. In a rush hour, some content distributors who have prepared for the live distribution in the time zone may not perform the live distribution in that time zone. In order to prevent such a problem and to effectively use the streaming server to perform live distribution, it is considered that the streaming server should be reserved.) Nishimura did not disclose a data transmitting step wherein data transmitting means of the server transmits to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted by the communication terminal; and a data receiving step wherein data receiving means of the communication terminal receives the data transmitted by the server in accordance with the transmission request for transmission of the data. The general concept of a data transmitting step wherein data transmitting means of the server transmits to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted by the communication terminal; and a data receiving step wherein data receiving means of the communication terminal receives the data transmitted by the server in accordance with the transmission request for transmission of the data is well known in the art as taught by Takihiro. Takihiro discloses a data transmitting step wherein data transmitting means of the server transmits to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted by the communication terminal; and a data receiving step wherein data receiving means of the

communication terminal receives the data transmitted by the server in accordance with the transmission request for transmission of the data. (Col 26 liens 62-67 and Col. 27 lines 1-7 On the resource reservation list window 1200, a reservation information list 1210 including a reserver, a communication destination, communication start date and time, communication end date and time, communication quality, and the like is displayed. When the user depresses an OK button 1220, the resource reservation list window 1200 is erased. When the user depresses a detail button 1230, detailed information regarding a reservation item selected in the reservation information list at that time is displayed on the resource reservation detail window. Since the user can always confirm the resource reservation state as mentioned above, the reservation request can be issued in consideration of the use state of the network). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nishimura to include a data transmitting step wherein data transmitting means of the server transmits to the communication terminal the data stored in the data storing means, in response to the transmission request for transmission of the data transmitted by the communication terminal; and a data receiving step wherein data receiving means of the communication terminal receives the data transmitted by the server in accordance with the transmission request for transmission of the data in order to provide the resource can be effectively used and low-cost services can be provided to the user.

Regarding claim 18

Referring to claim 18 Nishimura and Takihiro discloses all the limitations of claim 18 which is described above. Nishimura also discloses wherein in the reservation candidate generating step, the reservation candidate selecting means of the server, in generating the reservation candidate information, temporarily allocates in the reservation table, reservations for the download corresponding to the time information included in the reservation candidate information, together with information to identify the communication terminal having transmitted the transmission request for transmission of the reservation candidate information, and wherein in the reservation registering step, the reservation registering means of the server adopts the reservation in the time zone corresponding to the reservation time information included in the reservation choice information transmitted by the communication terminal, among the reservations temporarily allocated together with the information to identify the communication terminal, in the reservation table, and cancels the other reservations temporarily allocated together with the information to identify the communication terminal, in the reservation table. (Col. 8 lines 32-43 As shown in FIG. 6B, "operation" of the GUI in the upload mode includes an item to instruct connection/disconnection with the Internet ("connect/disconnect Net"), an item to instruct start/end of transmission of image data ("transmit start/stop"), an item to instruct movement of the focus F to the list display area 43 ("Move focus"), an item to instruct a view inside the transmission capsule icon SC, that is, a view of the list of image data selected to be sent ("see

transmission capsule"), etc. and it is possible to select a desired item by rotating the operation dial 126b to move the focus F to a desired item and then pressing the operation dial 126b.)

Regarding claim 19

Referring to claim 19 Nishimura and Takihiro discloses all the limitations of claim 17 which is described above. Nishimura also discloses wherein in the reservation candidate generating step, the reservation candidate generating means of the server, in generating the reservation candidate information, generates the reservation candidate information preferentially contain the time information about time zones with a large number of said reservation frames to which the reservation for the download is not allocated, based on the reservation table. (Col.2 lines 5-23 Furthermore, the content distributor may want to distribute content to specific people by the live distribution in a reserved time zone. For example, in the case of distributing content of image data, etc. of pictures taken of a wedding ceremony and wedding reception, etc. by the live distribution, it may be desired that live video, etc. of the wedding ceremony be presented to the couple's family members and friends, etc. who are absent from the ceremony. In the case where it is desired that live video, etc. of the wedding ceremony be presented to those family members and friends, etc., the content distributor may notify that people of the distribution time and the connection method to receive distribution, that is, the method of accessing the streaming server, by telephone, etc. in

advance, and the family members and friends, etc. can receive the content by accessing the streaming server at the distribution time, but such a notification procedure is **bothering work**).

Regarding claim 20

Referring to claim 20 Nishimura and Takihiro discloses all the limitations of claim 20 which is described above. Nishimura also discloses further comprising: an available range request transmitting step wherein available range acquiring means of the communication terminal transmits to the server a transmission request for transmission of available range information containing information about presence/absence of a time zone available for the reservation for the download in each of second predetermined periods obtained by subdividing a first predetermined period an available range generating step wherein available range generating means of the server generates the available range information in accordance with the transmission request for transmission of the available range information transmitted by the communication terminal, and transmits the available range information to the communication terminal; and an available range acquiring step wherein the available range acquiring means of the communication terminal receives the available range information transmitted from the server, wherein in the reservation candidate request transmitting step, the reservation candidate acquiring means of the communication terminal transmits to the server the transmission request for transmission of the reservation candidate

information containing the information about the second predetermined period selected based on the available range information received by the available range acquiring means (Paragraph [0132] Furthermore, this personal casting service allows connection to the streaming server 102 a predetermined time before the distribution start time based on the reservation, making it possible to complete connection processing such as authentication before the time at which the distribution is started and to perform live distribution at the reserved distribution start time. Therefore, if reservation times of different users are continuous, the following problem may occur. That is, the connection of a user receiving a distribution who reserved a previous time zone may overlap the connection after a predetermined time before distribution is started, by the user who reserved a posterior time zone, and the number of lines equal to the maximum number of users who can receive distribution are not enough. Thus, providing lines twice the maximum number of users can handle even the case where the connection by the user who reserves the preceding time zone overlaps the connection by the user who reserves the posterior time zone.) Nishimura did not disclose wherein the reservation candidate generating means of the server generates the reservation candidate information containing the time information about time zones available for the reservation for the download in the second predetermined period, based on the information about the second predetermined period included in the transmission request for transmission of the reservation candidate information transmitted by the communication terminal, and transmits the reservation candidate information to the communication terminal. It would have been obvious to one of ordinary skill in the art at

the time of the invention to modify Nishimura to include wherein the reservation candidate generating means of the server generates the reservation candidate information containing the time information about time zones available for the reservation for the download in the second predetermined period, based on the information about the second predetermined period included in the transmission request for transmission of the reservation candidate information transmitted by the communication terminal, and transmits the reservation candidate information to the communication terminal in order to provide the resource can be effectively used and low-cost services can be provided to the user.

Regarding claim 21

Referring to claim 21 Nishimura and Takihiro discloses all the limitations of claim 21 which is described above. Nishimura also discloses wherein in the available range generating step, the available range information generated by the available range generating means of the server contains level information indicating a number of said reservation frames to which the reservation for the download is not allocated, in each of the second predetermined periods.(Col.22 lines 3-15 The items to be entered in the reservation input column 222 are "channel" to select a channel to be used, "reservation date/time" to specify the date/time of reservation, "open level", "title" to enter the title of the content, "genre" to enter the genre to which the content belong, "open of e-mail" to select whether to open the e-mail address of the content provider, "Open of Web" to

select whether to open the URL of the Web page of the content provider, "password" to enter a password, "friend list", "outline" to write an outline of the content in up to a predetermined number of characters (e.g., 20 characters) and "detail" to write the detail of the content in up to a predetermined number of characters (e.g., 200 characters).

Regarding claim 22

Referring to claim 22 Nishimura and Takihiro discloses all the limitations of claim 22 which is described above. Nishimura also discloses wherein in the available range generating step, the available range information generated by the available range, generating means of the server is comprised of a list indicating binary values of the information about the presence/absence of a time zone available for the reservation for the download in each of the second predetermined periods. (Col. 8 lines 32-43 As shown in FIG. 6B, "operation" of the GUI in the upload mode includes an item to instruct connection/disconnection with the Internet ("connect/disconnect Net"), an item to instruct start/end of transmission of image data ("transmit start/stop"), an item to instruct movement of the focus F to the list display area 43 ("Move focus"), an item to instruct a view inside the transmission capsule icon SC, that is, a view of the list of image data selected to be sent ("see transmission capsule"), etc. and it is possible to select a desired item by rotating the operation dial 126b to move the focus F to a desired item and then pressing the operation dial 126b.)

Regarding claim 23

Referring to claim 23 Nishimura and Takihiro discloses all the limitations of claim 23 which is described above. Nishimura also discloses wherein in the available range generating step, the available range information generated by the available range generating means of the server is comprised of a list resulting from further text conversion of a list indicating binary values of the information about the presence/absence of a time zone available for the reservation for the download in each of the second predetermined periods. (Col.2 lines 5-23 Furthermore, the content distributor may want to distribute content to specific people by the live distribution in a reserved time zone. For example, in the case of distributing content of image data, etc. of pictures taken of a wedding ceremony and wedding reception, etc. by the live distribution, it may be desired that live video, etc. of the wedding ceremony be presented to the couple's family members and friends, etc. who are absent from the ceremony. In the case where it is desired that live video, etc. of the wedding ceremony be presented to those family members and friends, etc., the content distributor may notify that people of the distribution time and the connection method to receive distribution, that is, the method of accessing the streaming server, by telephone, etc. in advance, and the family members and friends, etc. can receive the content by accessing the streaming server at the distribution time, but such a notification procedure is bothering work).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashley d. Turner whose telephone number is 571-270-1603. The examiner can normally be reached on Monday thru Friday 7:30a.m. - 5:00p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-270-2603.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ashley Turner

Date: _____

Nathan Flynn

Date: _____

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2154